

Listing of Claims:

1. (Original) A method for driving a droplet ejection device having an actuator, comprising:
applying a multipulse waveform comprising two or more drive pulses to the actuator
to cause the droplet ejection device to eject a single droplet of a fluid,
wherein a frequency of the drive pulses is greater than a natural frequency, f_f , of the
droplet ejection device.
2. (Original) The method of claim 1, wherein the multipulse waveform has two drive pulses.
3. (Original) The method of claim 1, wherein the multipulse waveform has three drive pulses.
4. (Original) The method of claim 1, wherein the multipulse waveform has four drive pulses.
5. (Original) The method of claim 1, wherein the pulse frequencies are greater than about $1.3 f_f$.
6. (Original) The method of claim 5, wherein the pulse frequency is greater than about $1.5 f_f$.
7. (Original) The method of claim 6, wherein the pulse frequency is between about $1.5 f_f$ and
about $2.5 f_f$.
8. (Original) The method of claim 7, wherein the pulse frequency is between about $1.8 f_f$ and
about $2.2 f_f$.
9. (Original) The method of claim 1, wherein the two or more pulses have the same pulse period.
10. (Original) The method of claim 1, wherein the individual pulses have different pulse periods.
11. (Original) The method of claim 1, wherein the two or more pulses comprise one or more
bipolar pulses.

12. (Original) The method of claim 1, wherein the two or more pulses comprise one or more unipolar pulses.

13. (Original) The method of claim 1, wherein the droplet ejection device comprises a pumping chamber and the actuator is configured to vary the pressure of the fluid in the pumping chamber in response to the drive pulses.

14. (Original) The method of claim 1, wherein each pulse has an amplitude corresponding to a maximum or minimum voltage applied to the actuator, and wherein the amplitude of at least two of the pulses are substantially the same.

15. (Original) The method of claim 1, wherein each pulse has an amplitude corresponding to a maximum or minimum voltage applied to the actuator, and wherein the amplitude of at least two of the pulses are different.

16. (Original) The method of claim 15, wherein the amplitude of each subsequent pulse in the two or more pulses is greater than the amplitude of earlier pulses.

17. (Original) The method of claim 1, wherein the droplet ejection device is an ink jet.

18. (Currently amended) A method comprising driving a piezoelectric droplet ejection device with a waveform comprising one or more pulses each having a period less than about 20 microseconds to cause the droplet ejection device to eject a single droplet in response to the pulses.

19. (Original) The method of claim 18, wherein the one or more pulses each have a period less than about 12 microseconds.